The Office Action dated 06/10/2004 and the cited references have been carefully considered.

In page 2 of the Detailed Action the Examiner offered detailed and constructive corrections for the replacement claims filed on January 1, 2003. Each of the corrections suggested by the Examiner have been incorporated in the above-amended claims.

In page 3 of the present action, the Examiner rejects claims 14-23 under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement, in that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art, that the inventor had possession of the claimed invention. The Examiner cites "said recess being of virtually any shape, and not required to conform to the shape of said sleeve" (claim 14, lines 2-3) and "said recess not conforming in shape to said largely circular sleeve" (claim 19, line 3) The Examiner argues that the shape of the recess is not described in the specification at all.

The applicant respectfully recites from page 3 line 15, of the present specification, which states:

"FIG. **1** shows a cross sectional perspective of the preferred embodiment of the present invention. Part **3** represents material and or a housing wherein a channel **5**, is formed. Part **7** represents a sleeve or tube which is to be placed within channel **5.**"

This portion of the specification describes and shows the proverbial round peg mated to the square hole. It would not be lost on anyone versed in the art of joinery that the described and pictured shapes are disparaging shapes, and further that they are being joined in the manner of pure joinery, i.e. (page 3 line 6) "joinery refers to the unification of two or more separate objects, with the implication of melding, so as to render the two or more said objects as indistinguishably united; while hardware refers to objects which may serve to join, articulate, provide functionality and or decorate, but remain distinct from the materials and or the concept of seamless union."

That the square and round shapes are capable of being joined with a rigid seamless union, due to the intervention of modern adhesives and adhesives with additives under the present invention could not be overlooked by one versed in the art, as this is clearly novel, The concept opens up large implications for joining non conforming geometric shapes. Further the issues of

tolerances, between non conforming geometric shapes, with regard to seamless union, can not be casually discounted by one versed in the art, as joinery traditionally is all about tolerances between geometric shapes, when it comes to union.

The applicant further addresses within the specification (page 4, line1) "the preferred embodiment of the present invention incorporates bringing multiple variations of the Present Invention" ... (page 4, line12) ". The tolerances between sleeve **7** and dowel **9** in the preferred embodiment of the Present Invention are capable of extreme variation as well, depending upon application. In practice, part **7** is breached axially to permit the joining / fastening of a second object **11** to part **9**. The various radii of part **9**, as well as the various possible breach sizes to part **7**, serve to determine the tolerances between part **3**, and part **11**."

The Examiner continues "The term "in geometric conformity" (claim16, line 4; claim 17, line 4; claim 21, line 4;claim 22, line 4) contains new matter because applicant can have only one species, figure 2, with a recess 15 in the third object, it is unclear how applicant can have the shape "in geometric conformity" in claims 16 and 21, while "not in geometric conformity" in 17 and 22. This language lacks antecedent basis in the specification as filed and is of unknown scope and is therefore new matter.

The applicant respectfully submits that it would be obvious to one versed in the art of joinery, at the time that the application was filed, that having shown and described the union of disparaging shapes, i.e. the circle and the square, that a variation wherein the two shapes to be joined were in greater spatial conformity (i.e., circle – rectangle, oval – round; square – oval; large square – small rectangle) would be obvious, and discernable variations. This is precisely demonstrated as a variation, and described in text on page 5 line 14, and depicted in Figure 2 as a variation wherein a circle is joined to a rectangle. "Further, by increasing the surface area between part **9,** and part **11**. the concept of joinery as described herein, will be embraced. This may be achieved by increasing the flat, circular, or angular surface area between parts **9**, and **11**. Likewise, a variant of parts **3**, **5**, **7**, may be employed to embrace part **9**, in similar manner, so as to appeal to a traditional sense of joinery, as depicted in FIG **2**. Herein channel **15** is employed in part **11**, channel **15** being filled with adhesives and or adhesives with additives to eliminate the need for part **13**."

It would be obvious to anyone versed in the art by looking at Figure 1, and Figure 2, as described within the present specification, that the present invention renders geometric

conformity of shapes to be joined, moot, in either conforming geometrically, or not conforming geometrically, one to the other.

The applicant respectfully submits that the present application is compliant with the written description requirement, as would be reasonable understood by one versed in the art of joinery.

Claims 14-23 were rejected under 35 U.S.C. 112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner objected to the language of claim 14, stating "The passages" said recess being of virtually any shape, and not required to conform to the shape of said sleeve" (claim 14, lines 2-3) is not described in the specification as filed and is unclear as to the scope applicant seeks to claim because the recess having the same shape as the sleeve would not appear to be precluded."

As stated in the above arguments, the fact that the recess is not required to conform to the shape of the sleeve is a novel aspect of the present invention. This is described on page 3, line 15, and shown in Figure 1. "FIG. **1** shows a cross sectional perspective of the preferred embodiment of the present invention. Part **3** represents material and or a housing wherein a channel **5**, is formed. Part **7** represents a sleeve or tube which is to be placed within channel **5.**"

The Examiner further argues that the passage "adhesives and or adhesives with additives" is indefinite. However this is detailed in the specification on page 4, line 5 "said adhesives including but not limited to Epoxy, Resin, Polyester, and Water, based adhesives; with said additives including but not being limited to saw dust, iron oxide, semi precious minerals, graphite, fiberglass, kevlar, or powdered metals, for reasons of appearance or structure." The applicant has respectfully included these limitations within the claims.

The Examiner further objected to the indefinite use of the word "may", throughout the claims. The claims have been changed to correct this error.

The Examiner further objected to the term "geometric conformity". As stated above, it is novel that under the scope of the present invention, the shape may be "in geometric conformity" in claims 16 and 21, while "not in geometric conformity" in claims 17 and 22. As the elements of adhesives, or adhesives including specified additives, enables a square to be mated within a square (geometric conformity), or a square to be mated within a circle (not in geometric

conformity). However the applicant has replaced the expression "geometric conformity" with "similar geometric shape" in an effort to clarify the language of the claims.

The Examiner further argues the fact that the present joinery technique may be rigid in one variation, and articulated in further variation. While rigid and articulated have ordinary meanings, within the scope of the present invention, variations of the presented joinery technique may render either as defined within the specification on page 3, line 5: "In wood, metal, furniture, cabinetry and architectural work, joinery refers to the unification of two or more separate objects, with the implication of melding, so as to render the two or more said objects as indistinguishably united; while hardware refers to objects which may serve to join, articulate, provide functionality and or decorate, but remain distinct from the materials and or the concept of seamless union. The Present Invention exhibits novel versatility in that it may be employed as joinery, in a rigid manner, and may also function as a new type of hardware, capable of lateral and axial movement, and modularity. The preferred embodiment of the Present Invention represents the best of both classical and modern perspectives in that while it may employ modern materials, adhesives and novel techniques, the Present Invention is not bound strictly to modern materials or specific techniques to function properly."

The applicant respectfully submits that if he didn't want to contradict the ordinary meaning and methods of traditional joinery, he wouldn't bother trying to patent something novel. The apparent contradiction is defined within the specification sufficiently to support jargon specific to the present invention.

Claims 16, 17, 21, and 22 were rejected under 35 U.S.C. 103(a) as unpatentable over Firks (US 3889736) in view of Ehrman (US 3547472). The Examiner argues that the first object of Firks Figure 2, the frame, bearing a recess 35, 36, 39, 41, houses sleeve 23. The Examiner states that that the complex shape of the recess 35, 36, 39, 41, is different than the sleeve because the portion of the recess defined by the groove "fails to exactly follow the shape of the lower portion 48 of the sleeve. The applicant respectfully argues that the lower portion of sleeve 23 is in geometric conformity with recess 41 in that part 48 of sleeve 23 is comprised of barbs, intended to provide a mechanical connection between parts 48 and 41. Though by the nature of barbs, there must be protrusion and exclusion of contact with surfaces to be barbed to, the tolerances required for a physical mechanical connection to occur between surfaces, requires that the barb and cavity be in geometric conformity. For example, if the barbs of part 48 extend too

far, they cannot be received and enter recess 41. If the barbs of part 48 do not conform adequately to the recess 41, by nature of being too small, a mechanical connection will fail. The tolerances of Firks differ vastly with the present invention in that the tolerances of the recess and sleeve are made moot. In Firks, (col. 4, lines 17-19) the reference "Adhesives, brads, etc. may be employed to supplement the securing effect of the serrations." clearly indicates that this is a mechanical connection of the hardware variety, with supplemental options of adhesives, but not a joinery technique employing the melding of dissimilar objects, outside of geometric conformity. Further the recess of the present invention is a simple shape, whereas Firks requires a complex recess; parts 35, 36, 39, 41.

The Examiner further states that with regard to Firks "The difference is that the third object fails to have a recess so that the solid material can be adhesively secured within the recess. However Ehrman (figure1) teaches that it is well known to provide adhesive securement of the solid material comprising the strip portion 31 within a recess (col. 2, lines 62-65) in the third object 13 wherein the solid material 31 has a portion that extends from the recess into sleeve 36.", citing that this indicates a different shape than the solid material.

The applicant argues that Ehrman introduces modular dove tail joints run amok, however there is no break with traditional joinery, as in the present invention. In the above figure 1 of Ehrman, part 31 is of similar shape as solid material 13. Parts 31 and 32 are identical for reasons of ease of fabrication, with male and female parts inverted to form a modular structure, however, the tolerances of parts 13, 32, 32 and 14 all fall within the requirements of traditional joinery techniques, with square parts fitting within square recesses. The applicant respectfully submits that Ehrman does not read on the present invention.

The Examiner cites that "in a different joint configuration that the solid material 23c can have the same configuration as the recess in the third object. However 23c and 18 are in geometric conformity, and cannot vary from being in substantial geometric conformity, as Ehrman is merely an early modular design, employing traditional dove tail shapes. Neither Firks or Ehrman exhibit a round peg in a square hole, as stated above, both Firks and Ehrman require similar shapes between sleeve and recess unlike the present invention, therefore the present invention could not be obvious under Firks in light of Ehrman,

Claims 18 and 23 were rejected under 35 U.S.C. 103(a) as unpatentable over Firks (US 3889736) in view of Knechtel (US 1468786). Herein the Examiner further cites that under Firks,

frame 26 bears recess 35, 36, 39, 41, to house sleeve 23 wherein the shape of the recess being different than the sleeve because the portion of the recess defined by groove 41 fails to exactly follow the shape of the lower portion 48 of the sleeve. However, as stated above, the portion of the recess defined by groove 41 does exactly follow the shape of the lower portion sleeve 48 for the purposes of a functional mechanical connection employing barbs, wherein tolerances between parts must remain suitable for hardness of sleeve and recess material, to maintain a functional connection. Under the scope of the present invention such tight tolerances are obviated, which sets the present invention as novel over Firks.

Knechtel (US 1468786) demonstrates a variation on the dove tail joint, so as to be manufactured with simplicity approaching a rabbit joint. While Knechtel articulates the joint into place before the glue dries, Knechtel does not teach the use of adhesives, or adhesives with additives where said adhesives, or adhesives with additives obviate the need for geometric conformity between parts to be mated, as the joints in Knechtel require traditional geometric conformity to succeed in creating a mechanically sound structure.

Adam (GB 2041146) also fails to obviate the requirement of geometric conformity in maintaining an articulated modular fastening system.

All the claims presently in the application are believed to be allowable. The applicant would like to express his appreciation for the Examiners constructive critisim of the applicants efforts in presenting appropriate claims for the present invention.

If, for any reason the claims of this application are not in full condition for allowance, the applicant respectfully requests further constructive assistance and suggestions of the Examiner in drafting one or more acceptable claims pursuant to MPEP 707.07(j) or in making constructive suggestions pursuant to MPEP 706.03(d) in order that this application can be placed in allowable condition as soon as possible and without the need for further proceedings

Reconsideration and favorable action are respectfully solicited.

Respectfully submitted,

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